

Claims Amendment

Please amend claims 16 and 17, add claims 19 - 35, and cancel claims 1 - 15 and 18, as indicated below.

Claims 1 - 15 (Cancelled)

16. (Currently amended) A noise barrier apparatus for preventing external noise from causing noise in an ear on a side of a user's head, said noise barrier apparatus comprising:

a noise barrier device to be held against the side of the user's head at the ear;

wherein said noise barrier device comprises an ~~audio chamber defining part~~ ear cup constructed to ~~define~~ fit over and around the ear to provide an enclosed audio chamber including the ear canal of the ear when said noise barrier device is held against the side of the user's head at the ear;

wherein said ~~audio chamber defining part~~ ear cup includes a ~~cushion interface part~~ peripherally extending cushion to bear against the side of the user's head;

~~wherein said cushion interface part comprises a peripherally extending cushion to~~ and encircle the ear canal entrance of the ear;

wherein said peripherally extending cushion is deformable so as to be conformable to the side of the user's head at an area surrounding the ear ~~canal~~

entrance when said ~~audio chamber defining part~~ ear cup is held thereagainst;
and

wherein said peripherally extending cushion comprises a material which ~~is at least partially plastically deformable~~ provides a damping ratio greater than 0.75.

17. (Currently amended) ~~The A~~ noise barrier apparatus ~~according to claim 16, wherein each of said noise barrier devices comprises~~ for preventing external noise from causing noise in an ear on a side of a user's head, the noise barrier apparatus comprising:

an ear adapter body having a first end and a second end forward of said first end and insertable into the ear canal of ~~a respective one of the ears~~ the ear, said ear adapter body defining an enclosed audio chamber including the ear canal of the ear, said ear adapter body further having,

an ear canal section adjacent said second end,

an outer ear section adjacent said first end, and

a concha section disposed between said ear canal and outer ear sections, whereby said ear canal section is disposed in the ear canal of ~~a~~ respective the ear, the concha section is disposed adjacent the concha region of the ~~respective~~ ear, and the outer ear section is disposed outside the ~~respective~~ ear when said second end of said ear adapter body is inserted into the ~~respective~~ ear canal of the ~~respective~~ ear; and

~~said cushion interface parts each constitute~~ a concha cushion to bear against the concha region of the ear, said concha cushion being mounted to said concha section of ~~the respective~~ said ear adapter body and positioned so as to be interposed between the concha region of the ear and said concha section and being configured to encircle the ear canal entrance when said second end of said ear adapter body is inserted into the ear canal,

said concha cushion being deformable so as to be conformable to the concha region of the ear when held thereagainst; and

wherein said concha cushion comprises a material which is at least partially plastically deformable.

Claim 18 (Cancelled)

19. (New) The noise barrier apparatus of claim 16 wherein said material of said peripherally extending cushion further comprises an at least partially plastically deformable material contained in a flexible sheath.

20. (New) The noise barrier apparatus of claim 16 wherein said material of said peripherally extending cushion provides a damping ratio greater than or equal to 1.0.

21. (New) The noise barrier apparatus of claim 17 wherein said material of said concha

cushion further comprises an at least partially plastically deformable material contained in a flexible sheath.

22. (New) The noise barrier apparatus of claim 17 wherein said material of said concha cushion provides a damping ratio greater than or equal to 0.75.

23. (New) A noise barrier apparatus for preventing external noise from causing noise in ears on opposing sides of a user's head, each of the ears having a concha region opening into an ear canal, said noise barrier apparatus comprising:

a pair of noise barrier devices to be held against the opposing sides of the user's head and engaged with the concha regions of the respective ears;

a noise barrier device holding apparatus coupled to said noise barrier devices to hold said noise barrier devices against the opposing sides of the user's head and against the concha regions of the respective ears;

wherein said noise barrier devices each respectively comprise,

an ear adapter body having a first end and a second end forward of said first end and insertable into the ear canal of a respective one of the ears, said ear adapter body further having,

an ear canal section adjacent said second end,

an outer ear section adjacent said first end, and

a concha section disposed between said ear canal section and said outer ear section,

whereby said ear canal section is disposed in the ear canal of a respective ear, the concha section is disposed adjacent the concha region of the respective ear, and the outer ear section is disposed outside the respective ear when said second end of said ear adapter body is inserted into the respective ear canal of the respective ear, and

a concha cushion mounted to said concha section of said ear adapter body, said concha cushion being positioned so as to be interposed between the concha region of the ear and said concha section and to encircle the ear canal of the ear when said second end of said ear adapter body is inserted into the ear canal,

said concha cushion being deformable so as to conform to the concha region of the ear and comprising a material which is at least partially plastically deformable.

24. (New) The noise barrier apparatus of claim 23, wherein each of said concha cushions is fabricated from a material which is at least partially plastically deformable and is encased in a flexible sheath.

25. (New) The noise barrier apparatus of claim 23 further wherein each said concha cushion has a damping ratio greater than 0.75.

26. (New) The noise barrier apparatus of claim 25, wherein each said concha cushion is fabricated from a material which is at least partially plastically deformable and encased in a flexible sheath.

27. (New) The noise barrier apparatus of claim 25 further wherein each said concha cushion has a damping ratio greater than 1.0.

28. (New) The noise barrier apparatus of claim 27, wherein each said concha cushion is fabricated from a material which is at least partially plastically deformable and encased in a flexible sheath.

29. (New) The noise barrier apparatus of claim 23, wherein said noise barrier device holding apparatus further comprises:

ear tubes of a stethoscope.

30. (New) The noise barrier apparatus of claim 26, wherein said noise barrier device holding apparatus further comprises:

ear tubes of a stethoscope.

31. (New) A noise barrier apparatus for preventing external noise from causing noise in ears on opposing sides of a user's head, each of the ears having an ear canal, said noise barrier apparatus comprising:

a pair of noise barrier devices to be held against the opposing sides of the user's head and around the respective ears;

a noise barrier device holding apparatus coupled to said noise barrier devices to hold said noise barrier devices against the opposing sides of the user's head at the respective ears;

wherein said noise barrier devices respectively comprise ear cups constructed to fit over and around the respective ears so as to provide enclosed audio chambers including the ear canals of the ears,

wherein said ear cups respectively include peripherally extending cushions to bear against the opposing sides of the user's head and encircle the ears;

wherein said peripherally extending cushions are deformable so as to be conformable to the opposing sides of the user's head at areas surrounding the ears, respectively, when said audio chamber defining parts are held thereagainst by said noise barrier device holding apparatus; and

wherein each of said peripherally extending cushions comprises a material

providing a damping ratio greater than 0.75.

32. (New) The noise barrier apparatus of claim 31, wherein said material of each of said peripherally extending cushions provides a damping ratio greater than or equal to 1.0.

33. (New) The noise barrier apparatus of claim 31, wherein each said peripherally extending cushion is fabricated from a material which is at least partially plastically deformable and encased in a flexible sheath.

34. (New) The noise barrier apparatus of claim 32, wherein each said peripherally extending cushion is fabricated from a material which is at least partially plastically deformable and encased in a flexible sheath.

35. (New) The noise barrier apparatus of claim 31, wherein

said noise barrier device holding apparatus comprises a head band connecting to each of said ear cups and constructed to extend around a top portion of the user's head.

36. (New) The noise barrier apparatus of claim 33, wherein

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said noise barrier device holding apparatus comprises a head band connecting to each of said ear cups and constructed to extend around a top portion of the user's head.